

Energy Exploration

Procedure:

1. Fill a beaker $\frac{3}{4}$ full of water and start heating on Bunsen burner.
2. Fill a second beaker moderately full of water and add some ice.
3. Gather 2 pieces of different metals and weigh them.
4. Put the pieces of metal in the water that is boiling.
5. Measure the temperature of the ice water.
6. Remove ice and add cold water to two separate Styrofoam cups. (NO solid ice) Measure the water with a graduated cylinder and only the absolute minimum amount to cover the blocks that will be placed in the cold water.
7. Assuming the hot water is nearly boiling or boiling. Remove the two pieces of metal and each of them to a separate cup of cold water.
8. Measure the maximum rise in temperature for each cup.

Questions.

1. Where the two cups of cold water the same temperature?
2. Where the two blocks the same temperature?
3. Where the blocks the same mass?
4. What is the change in degree Celsius/gram of metal?
5. Did the blocks warm the water the same?
6. Did they raise the water the same if you consider mass?
7. What do you conclude?

Data:

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